

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)

Inquiry Concerning the Deployment of
Advanced Telecommunications)

Capability to All Americans in a Reasonable
and Timely Fashion, and Possible Steps)

to Accelerate Such Deployment)

Pursuant to Section 706 of the)

Telecommunications Act of 1996)

CC Docket 98-146

Comments of Level 3 Communications, Inc.

Level 3 Communications, Inc. ("Level 3") respectfully submits the following comments in response to the Notice of Inquiry ("NOI") in the above-captioned proceeding concerning the deployment of advanced telecommunications capacity to all Americans.¹

I. Introduction and Summary

As an initial matter, Level 3 commends the Federal Communications Commission ("FCC") for issuing this NOI in fulfillment of its statutory duties. Level 3 also commends the FCC for rejecting the petitions filed by several Regional Bell Operating Companies ("RBOCs") which sought to bootstrap Section 706 as a means to eviscerate the key mechanisms in the Telecommunications Act of 1996 ("1996 Act") designed to accelerate the deployment of advanced telecommunications capacity ("ATC") to all Americans.

Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, CC Docket No. 98-146, Notice of Inquiry, FCC 98-187 (rel. Aug. 7, 1998) ("NOI").

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In these comments,² Level 3 shows that it is offering and planning to offer ATC and enhanced services to its customers.³ Level 3's targeted customer base includes both business and residential consumers in diverse geographical areas, both nationally and internationally. Although Level 3's comments focus solely on its planned deployment of ATC and enhanced services, Level 3 expects that many other providers of competitive services will submit information concerning their deployment of ATC and enhanced services. While any one provider may not provide service to all Americans, collectively, the ATC and enhanced service offerings of competitive providers and incumbent providers will reach all Americans. Level 3 is confident that after collecting the information required by Section 706 of the 1996 Act, the FCC will determine that ATC is being deployed on a reasonable and timely basis to all Americans and that market forces are already addressing the burgeoning demand for data transmission capacity.

II. Level 3's ATC and Enhanced Service Offerings

Level 3 is a communications and information services company that is building an advanced Internet Protocol ("IP") technology-based network across the U.S., connecting

² At this time, Level 3 does not comment on others' deployment of ATC, the definition of ATC, what constitutes reasonable and timely deployment of ATC, or what actions the FCC should take to remove barriers to deployment. Level 3 reserves its right to address these issues, which will be raised by other commentors, in its reply comments.

³ In these comments, Level 3 generally describes the IP-based network and services it plans to offer without necessarily distinguishing whether a specific service is an advanced telecommunications service or an unregulated enhanced service subject to the FCC's ancillary jurisdiction over wire communications.

25 cities. Level 3's network is scheduled to be completed in phases by 2001. The company also plans to build local networks in cities across the country and to interconnect these city networks with its national long distance network. Additionally, the company has announced plans to expand internationally.

The Level 3 network will be the first national communications network to use Internet technology end-to-end. Level 3 will focus primarily on the business market using its IP-based network to provide a full range of communications services -- including local, long distance and data transmission -- as well as other enhanced services. Additionally, the company will offer a range of Internet access services at varying capacity levels, and, as technology development allows, at specified levels of quality of service and security to meet the needs of its business customers. Level 3 plans to begin providing services in as many as 15 major U.S. cities by the end of 1998.

Level 3 shaped its strategy to build an IP-based network from the ground up because of a fundamental shift that is occurring in the communications industry -- a shift as important as that from the telegraph to telephone or from mainframe to the personal computer. It is a shift that Level 3 and a growing number of industry experts believe will change the way people communicate at a fundamental level.

That change is a move from the traditional "circuit switched" networks that were designed primarily for voice communications -- and which have served customers well for close to a century -- to newer "packet switched" networks using IP. The new technology

makes it possible to move information at a much lower cost, because packet switching technology makes much more efficient use of the network capacity.

Level 3 believes it is well positioned for the fundamental shift to the new technology because the company has no investment in, or commitment to, the older circuit-switched technology. The company will therefore build its network from the ground up with the new IP technology. Equally important, the company plans to design the network to be upgradeable, so it can evolve as the technology evolves – what Level 3 calls a “continuously upgradeable network.” Furthermore, unlike current IP telephony providers, Level 3 will provide a seamless service to its customers that is transparent both to end users and the traditional public switched telecommunications network (“PSTN”). The transparency is enabled by a “soft switch,” which translates packetized information into a form that the PSTN recognizes as circuit-switched.

The power of the flexibility of IP technology may be briefly illustrated by one of the services Level 3 proposes to offer to its virtual private network (“VPN”) customers. A customer leasing VPN facilities from Level 3 is acquiring a certain quantum of telecommunications throughput with such parameters as may be agreed upon between the carrier and the customer: transmission rates; throughput capacity; origination and termination points; network monitoring; degree of redundancy; and the like. But unlike the customer leasing traditional circuit-switched telephony, the IP-based telecommunications customer retains the capability to configure the facilities for an intranet, an extranet, or for

high density flow of particular data streams. Not only may the customer configure the capacity in any one of numerous ways, and at any time of day, but equally important, the customer will be able to alter that configuration by accessing Level 3's web homepage and, by inputting certain data, modify the configuration of the VPN on a realtime basis. Level 3 need not even know of the change because Level 3's network has been designed to accept such reconfigurations routinely.

Level 3's advanced IP-based network will enable business customers to benefit from the lower cost and service offerings made possible by Internet technology. Equally important, Level 3 has an operating subsidiary, PKS Information Services, Inc. (PKSIS), that provides computer outsourcing and systems integration services to businesses. PKSIS also helps corporations update their legacy systems so that they are "web enabled" -- that is, technically able to take advantage of the benefits of Internet technology. That, in turn, helps Level 3 to provide service to these customers using Internet technology and thereby to move the customer's communications traffic seamlessly onto Level 3's IP-based network.

The new network is the natural evolution of the web-enabling business of PKSIS. Customers will be able to get an end-to-end solution -- their systems updated for Internet technology and the ability to move their information over a new IP-based network. Customers will also be able to get both critical needs met by one supplier -- Level 3 Communications, Inc.

III. Level 3's Target Markets and Customers

Level 3's subsidiary, Level 3 Communications, LLC, is actively seeking licenses and authorizations from regulators in the U.S., the European Community, and the Pacific region to establish a world-wide state-of-the-art communications network, offering to business and government users high speed and high quality services including, but not limited to, switched voice, data, facsimile, private line, virtual private line, and web-hosting. Level 3 will also be a carriers' carrier. Furthermore, beginning first quarter 1999, in select cities, Level 3 intends to expand its service offerings to provide presubscribed long distance services to residential consumers. Level 3 has received authorizations to provide local and long distance services in 14 states⁴ and the District of Columbia and has filed applications in 12 additional states. Level 3 has also obtained Section 214 authority from the FCC and has filed applications with international regulatory authorities in the United Kingdom.

IV. Level 3's Access to Financing

Level 3 was listed on the Nasdaq National Market on April 1, 1998 ("LVLT") and was added to the Nasdaq 100 index on August 27, 1998. The company's market capitalization is approximately \$11.9 billion. On April 28, 1998, Level 3 received \$1.94 billion of proceeds from an offering of \$2 billion in Senior Notes.

⁴ The initial 14 states include California, Colorado, Georgia, Illinois, Massachusetts, Michigan, Maryland, New Hampshire, New Jersey, New York, Pennsylvania, Texas, Virginia and Washington.

V. Level 3 Network Buildout

Level 3 plans to lay approximately 23,000 network miles of fiber-optic cable on three continents. Level 3 selected Peter Kiewit Sons', Inc. to construct the Level 3's 15,000 mile intercity U.S. network. The overall cost of building this network is estimated at \$2 billion. In July, 1998, Level 3 entered into a cost-sharing and IRU agreement valued at \$700 million with Internext, LLC, regarding the construction of a multiconduit fiber optic nationwide communications system. Under the agreement, Internext acquired the right to use 24 fibers and certain associated facilities installed along the route of the system. Also, under the terms of the agreement, Internext acquired the right to an additional conduit for its exclusive use and to share costs and acquire rights to additional fibers in certain subsequent cable installations in Level 3 conduits.

Until Level 3's network is completed, Level 3 will be leasing a national network from Frontier Communications International, Inc. ("Frontier"). Under the companies' agreement, Level 3 will lease approximately 8,300 route miles of OC-12 network capacity on Frontier's new 13,000 SONET fiber optic, IP-capable network for a period of up to five years. The Frontier agreement requires an aggregate minimum payment of \$165 million over its five-year term but does not impose monthly minimum consumption requirements on Level 3, allowing Level 3 to order, alter or terminate circuits as it deems appropriate. As Level 3's network segments are completed, Level 3 will begin to take Frontier's leased network portions out of service.

VII. CLEC Bypass of the Local Loop Is Not Feasible in the Short to Medium Term

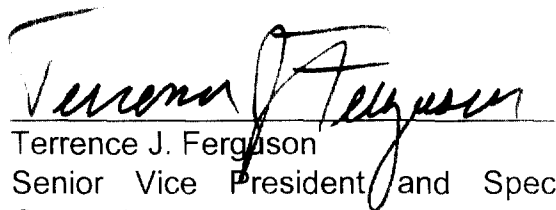
Level 3's business plan contemplates in the early stages reliance on existing circuit-switched facilities, particularly the local loop. Level 3 has recently filed comments in CC Docket No. 98-5 that address in detail the bottleneck issues facing providers of high-bandwidth digital communications services.⁵ Rather than repeat those facts and arguments here, Level 3 attaches a copy of its comments on the LCI Petition as Exhibit A hereto, and incorporates them by reference. As explained in Exhibit A, TCP/IP-based communications networks, such as Level 3's, will face even more significant bottleneck issues than competitive networks built to traditional telephony standards. IP networks face both physical and bandwidth bottlenecks in seeking "last-mile" access to customer's premises. The full potential of these networks cannot be realized unless their operators can obtain technically efficient and economically reasonable access to the bandwidth of the embedded loop network. Without such access, only those businesses that can afford dedicated high-capacity facilities will be able to benefit from the full potential of Internet-based information and other packet-switched telecommunications services. Efficient and affordable access to loops will be the only viable means of bringing these services to the vast majority of residential consumers, as well as many small and mid-sized businesses which cannot afford high-capacity facilities.

⁵ Comments of Level 3 Communications, Inc., *Petition of LCI Telecom Corp. for Declaratory Rulings*, CC Docket No. 98-5 (filed Mar. 23, 1998).

VI. Conclusion

As demonstrated above, Level 3 is providing, and intends to provide, ATC and enhanced services to commercial (including business, government and carrier) and residential customers. Level 3 urges the FCC to recognize the contributions competitive carriers such as Level 3 are making to the ATC and enhanced services markets and the significant investments competitive carriers are committing to providing such services to all Americans.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Terrence J. Ferguson", is written over a horizontal line.

Terrence J. Ferguson
Senior Vice President and Special
Counsel

Dated: September 14, 1998

Level 3 Communications, Inc.


CERTIFICATE OF SERVICE

I, Terrence J. Ferguson, hereby certify that on this 14th day of September, 1998, a copy of the foregoing **COMMENTS OF LEVEL 3 COMMUNICATIONS, INC., CC Docket 98-146**, was served on each of the following parties via hand delivery.

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A handwritten signature in cursive script that reads "Terrence J. Ferguson / 909".

Terrence J. Ferguson